

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Page 1 of 4

C mplete if Known

Application Number	
Filing Date	Herewith
First Named Inventor	Budach et al.
Art Unit	
Examiner Name	to be assigned
Attorney Docket Number	021430-000212US

U.S. PATENT DOCUMENTS						
Examiner	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
PTC	AA	US-4,810,858		03/07/1989	Shanks et al.	
	AB	US-4,828,387		05/09/1989	Sawyers et al.	
	AC	US-4,882,288		11/21/1989	North et al.	
	AD	US-4,931,384		06/08/1990	Layton et al.	
	AE	US-4,952,056		08/28/1990	Tiefenthaler	
	AF	US-4,978,503		12/18/1990	Shanks et al.	
	AG	US-4,992,385		02/12/1991	Godfrøy	
	AH	US-5,006,716		04/09/1991	Hall	
	AI	US-5,082,629		01/21/1992	Burgess et al.	
	AJ	US-5,164,589		11/17/1992	Sjodin	
	AK	US-5,186,897		02/16/1993	Eason et al.	
	AL	US-5,192,502		03/09/1993	Attridge et al.	
	AM	US-5,208,111		05/04/1993	Decher et al.	
	AN	US-5,242,828		09/07/1993	Bergström et al.	
	AO	US-5,294,402		03/15/1994	Schrepp et al.	
	AP	US-5,312,729		05/17/1994	Allen et al.	
	AQ	US-5,374,563		12/20/1994	Maule	
	AR	US-5,415,842		05/16/1995	Maule	
	AS	US-5,434,663		06/18/1995	Maule	
	AT	US-5,436,161		06/25/1995	Bergström et al.	
	AU	US-5,455,178		10/03/1995	Fattinger	
	AV	US-5,468,620		11/21/1995	Molloy et al.	
	AW	US-5,478,756		12/26/1995	Gizeli et al.	
	AX	US-5,480,687		01/02/1996	Heming et al.	
	AY	US-5,491,556		02/13/1996	Stewart et al.	
	AZ	US-5,492,840		02/20/1996	Malmqvist et al.	
	BA	US-5,532,170		07/02/1996	Buckle et al.	
	BB	US-5,554,541		09/10/1996	Malmqvist et al.	
	BC	US-5,631,734		05/20/1997	Stem et al.	
	BD	US-5,641,840		06/24/1997	Hanning	
	BE	US-5,663,790		09/02/1997	Ekström et al.	
	BF	US-5,712,705		01/27/1998	Fattinger et al.	
	BG	US-5,716,854		02/10/1998	Lóflás et al.	
	BH	US-5,738,825		04/14/1998	Helmut Rudigier et al.	
PTC	BI	US-5,770,462		06/23/1998	Molloy	

Examiner
Signature

PATRICK CONNOLLY

Date
Considered

5.11.2004

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Page 2 of 4

Complete if Known

Application Number	
Filing Date	Herewith
First Named Inventor	Budach et al.
Art Unit	
Examiner Name	to be assigned
Attorney Docket Number	021430-000212US

U.S. PATENT DOCUMENTS

Examiner	Cite No.	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
PTC	BJ	US-5,779,978	07/14/1998	Hartmann et al.	
	BK	US-5,822,472	10/13/1998	Danielzik et al.	
	BL	US-5,830,766	11/03/1998	Attridge et al.	
	BM	US-5,846,843	12/08/1998	Simon	
	BN	US-5,874,219	02/23/1998	Rava et al.	
	BO	US-5,898,503	04/27/1999	Keller et al.	
	BP	US-5,912,456	06/15/1999	Melendez et al.	
	BQ	US-5,946,083	08/31/1999	Melendez et al.	
	BR	US-5,955,729	09/21/1999	Nelson et al.	
	BS	US-5,959,292	09/28/1999	Duveneck et al.	
	BT	US-5,965,456	10/12/1999	Malmqvist et al.	
	BU	US-5,972,612	10/26/1999	Malmqvist et al.	
	BV	US-5,981,956	11/09/1999	Stern	
	BW	US-6,078,705	06/20/2000	Neuschäfer et al.	
	BX	US-6,093,536	07/25/2000	Drake et al.	
	BY	US-6,111,248	08/29/2000	Melendez et al.	
	BZ	US-6,111,652	08/29/2000	Melendez et al.	
	CA	US-6,127,183	10/03/2000	Ivarsson et al.	
	CB	US-6,141,096	10/31/2000	Stern et al.	
	CC	US-6,143,574	11/07/2000	Karlsson et al.	
	CD	US-6,183,696	02/06/2001	Elkind et al.	
	CE	US-6,191,847	02/20/2001	Melendez et al.	
	CF	US-6,198,869	03/08/2001	Kraus et al.	
	CG	US-6,200,814	03/13/2001	Malmqvist et al.	
	CH	US-6,203,989	03/20/2001	Goldberg et al.	
	CI	US-6,207,381	03/27/2001	Larsson et al.	
	CJ	US-6,207,960	03/27/2001	Stern	
	CK	US-6,211,954	04/03/2001	Danielzik et al.	
	CL	US-6,218,194	04/14/2001	Lyndin et al.	
	CM	US-6,225,625	05/01/2001	Pirung et al.	
	CN	US-6,245,578	06/12/2001	Molloy	
	CO	US-6,252,236	06/26/2001	Trulson et al.	
	CP	US-6,289,144	09/11/2001	Neuschäfer et al.	
	CQ	US-6,289,286	09/11/2001	Andersson et al.	
PTL	CR	US-6,294,327	09/25/2001	Walton et al.	

Examiner Signature	PATRICK CONNOLLY	Date Considered	5.11.2004
-----------------------	------------------	--------------------	-----------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.88. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Page 3 of 4

Complete if Known

Application Number	
Filing Date	Herewith
First Named Inventor	Budach et al.
Art Unit	
Examiner Name	to be assigned
Attorney Docket Number	021430-000212US

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
PJC	CS	WO	97/29362	PCT	08/14/1997			
	CT	EPO	0 178 083		04/16/1986			
	CU	UK	2 227 089		07/18/1990			
	CV	UK	2 256 477		12/09/1992			
	CW	WO	90/03382	PCT	04/05/1990			
	CX	WO	91/16425	PCT	10/31/1991			
	CY	EPO	0 455 067	A2	11/06/1991			
	CZ	WO	92/10092	PCT	06/25/1992			
	DA	WO	95/33197	PCT	12/07/1995			
	DB	WO	96/26432	PCT	08/29/1996			
	DC	WO	96/35940	PCT	11/14/1996			
	DD	WO	97/02357	PCT	01/23/1997			
	DE	WO	98/21571	PCT	05/22/1998			
	DF	WO	98/27430	PCT	06/25/1998			
	DG	WO	99/13320	PCT	03/18/1999			
	DH	WO	99/26059	PCT	05/27/1999			
	DI	WO	00/75644	A1	12/21/2000			
PJC	DJ	WO	01/02839	A1	01/11/2001			

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
PJC	DK	Adlard, et al., The American Physical Society, Physical Review Letters, Vol. 79, No. 9, "Localization of One-Photon States," pp. 1585-1587, (1997)	
PJC	DL	Parriaux, et al., Pure Appl. Opt. 5, Printed in the UK, "Coupling gratings as waveguide functional elements," pp. 453,469 (1996)	
PJC	DM	Rosenblatt, et al., IEEE Journal of Quantum Electronics, Vol. 33, No. 11, "Resonant Grating Waveguide Structures," November, 1997	
PJC	DN	Dolder, et al., Derwent Abstracts, 1991-339813 [46], "Method for the Light-Induced Immobilization of Biomolecules on Chemically "inert" Surfaces" (WO 91/16425 - 10/31/91)	

Examiner Signature	PATRICK CONNOLLY	Date Considered	5/11/2007
--------------------	------------------	-----------------	-----------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	
		Filing Date	Herewith
		First Named Inventor	Budach et al.
		Art Unit	
		Examiner Name	to be assigned
Page 4 of 4	Attorney Docket Number	021430-000212US	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
PJC	DO	Sychugov, et al., Sensors and Actuators, B 38-39, "Waveguide Coupling Fratings for High-Sensitivity Biochemical Sensitive," pp. 360-364 (1997)	
PJC	DP	Tyagi, et al., Nature Biotechnology, "Molecular Beacons: Probes that Fluoresce Upon Hybridization," Vol. 14, pp. 303-308 (March 1996)	
PJC	DQ	Wang, et al., Applied Optics, Vol. 32, No. 14, "Theory and Application of Guided-Mode Resonance Filters," (May 10, 1993)	
PJC	DR	Kogelnik, H., "Theory of Optical Waveguides," ed. Tamit, T., Guided-Wave Optoelectronics, pp. 7-88, Springer-Verlag: New York, (1988)	

Examiner Signature	PATRICK CONNOLLY	Date Considered	5.11.2004
--------------------	------------------	-----------------	-----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.